

The Effect of Foreign Sell, Required Return, Expected Return, Actual Return, and Risk on Herding Behavior

Factors Influencing
Herding Behavior in
IDX

Pristin Prima Sari^{1*}, Ardian Prima Putra², Harmadi³

¹Department of Management, Faculty of Economics and Business, Universitas Sarjanawiyata Tamansiswa; Yogyakarta, Indonesia

²Department of Management, Faculty of Economics and Business, Universitas Veteran Bangun Nusantara; Sukoharjo, Indonesia

³Department of Management, Faculty of Economics and Business, Universitas Sebelas Maret; Surakarta, Indonesia

*Corresponding Author E-Mail: p2s.prist@gmail.com

2813

Submitted:
March 31, 2026

Revised:
April 16, 2026

Accepted:
May 28, 2026

Published Online:
May 31, 2026

ABSTRACT

This study is motivated by the phenomenon of herding behavior in the capital market, which is influenced by various financial factors, including foreign sell, required return, expected return, actual return, and risk, particularly in manufacturing companies listed on the Indonesia Stock Exchange during the 2024–2025 period. The objective of this study is to obtain empirical evidence regarding the effect of these variables on herding behavior in January and December 2024–2025. The method employed is a quantitative approach through hypothesis testing using data from manufacturing firms as the research sample. The results indicate that in January, actual return and beta risk have a significant effect on herding, and simultaneously, all variables significantly influence herding behavior. Meanwhile, in December, required return and expected return are found to have a significant effect on herding. The difference test reveals significant differences in expected return and actual return between January and December. The implications of this study provide insights for investors and companies in understanding market behavior and formulating more rational investment strategies. In conclusion, return and risk factors play a crucial role in shaping herding behavior in the Indonesian capital market.

Keywords: Actual Return, Expected Return, Herding Behavior, IDX, Required Return, Risk.

INTRODUCTION

Investor behavior in capital markets is often influenced by the flow of information obtained from securities firms, brokers, and fellow investors (Baker & Iyer, 1992; Ahmad, 2017). Such information not only shapes perceptions but also affects investment decision-making, leading to recurring behavioral patterns. One prominent phenomenon is herding behavior, defined as the tendency of investors to imitate the actions of others without conducting adequate independent analysis (Vo & Phan, 2019; Loang, 2025). In capital markets, herding can amplify stock price volatility because collective investor actions tend to move in the same direction, potentially causing market overreaction or underreaction (Christie & Huang, 1995; Hoitash & Krishnan, 2008). Therefore, understanding the determinants of herding behavior is particularly important, especially in emerging markets such as Indonesia (Zakamulin, 2024).

Herding behavior is closely related to the risk–return framework. Variables such as expected return, required return, and actual return are key indicators influencing investor preferences in making investment decisions (Obamuyi, 2013; Seetharaman et al., 2017). Expected return reflects investors' expectations of future gains, while required return

JIMKES

Jurnal Ilmiah Manajemen
Kesatuan
Vol. 14 No. 3, 2026
pp. 2813-2824
IBI Kesatuan
ISSN 2337 – 7860
E-ISSN 2721 – 169X
DOI: 10.37641/jimkes.v14i3.5255

represents the minimum rate of return demanded as compensation for risk (Botosan et al., 2011; Maneemaroj et al., 2021). Meanwhile, actual return captures realized gains and often serves as a benchmark for evaluating prior investment decisions. In addition, risk, particularly systematic risk measured by beta, plays a crucial role in shaping investor behavior in financial markets (Campbell & Mei, 1993; Alexandridis & Hasan, 2020; Shankar et al., 2021). Furthermore, foreign investor activities, such as foreign sell, may significantly affect market dynamics, as foreign investors typically possess superior information and resources, thereby triggering imitation responses from domestic investors (Kim & Wei, 2002; Zhang et al., 2014).

Despite extensive research on herding behavior, a notable research gap remains. Prior studies by Spyrou (2013) and Rahayu et al. (2021) tend to examine these variables in isolation or focus on a single time period. Moreover, comparative analyses of herding behavior across different periods, such as January and December, remain limited, particularly in the Indonesian capital market context. This is important because temporal differences may reflect seasonal effects that influence investor behavior (Wibowo, 2025; Thamrin et al., 2025). Accordingly, there is a need for a comprehensive study that integrates multiple variables within a unified analytical framework while simultaneously considering temporal differences.

This study offers several key novelties. First, it integrates foreign sell, expected return, required return, actual return, and risk into a single comprehensive model to explain herding behavior. Second, it employs recent data from the 2024–2025 period, providing a more accurate representation of current market dynamics. Third, it not only examines the relationships among variables but also analyzes differences in herding behavior between January and December, offering deeper insights into temporal dynamics in investor behavior.

Based on the above, the objectives of this study are to empirically examine the effects of foreign sell, required return, expected return, actual return, and risk on herding behavior in companies listed on the Indonesia Stock Exchange, and to analyze the differences in these variables between January and December during the 2024–2025 period in relation to herding behavior. This study is expected to provide several contributions. For investors, it offers valuable insights into the determinants of market behavior, thereby improving investment decision-making. For corporate management, it provides a basis for managing stock-related risk and return more effectively. Additionally, this study contributes to the academic literature in finance, particularly on investor behavior and herding in emerging markets. Thus, it not only enriches theoretical understanding but also offers practical implications for interpreting capital market dynamics in Indonesia.

LITERATURE REVIEW & HYPOTHESIS DEVELOPMENT

The Influence of Independent Variables on Herding Behavior

Herding behavior occurs when investors tend to follow majority decisions or market trends rather than relying on individual rational judgment. Both actual return and required return have been found to significantly influence herding behavior. Investment return represents the profit obtained from stock market instruments and plays a critical role in investor decision-making (Rahayu et al., 2021; Mand et al., 2023). Previous studies by Peterson et al. (1982) and Puspitarini and Prajawati (2025) indicate that returns significantly affect herding, as investors attempt to maximize profit opportunities and minimize potential losses through collective behavior. Furthermore, expected return is used as an indicator of investor expectations, addressing gaps in the literature regarding the relationship between herding and expected return, which remains underexplored (Cont & Bouchaud, 2000; Adnan, 2023; Ikhsan et al., 2024).

In addition to returns, risk also plays an important role in triggering herding behavior. Risk in stock investment is often considered a constraint that influences investor decision-making, motivating collective behavior as a form of “safety” under market uncertainty (Parihar & Gupta, 2024; Karki et al., 2024). However, Hwang and Salmon (2004) also

note that herding does not always occur during periods of negative market returns or during the COVID-19 pandemic, indicating that risk alone is not sufficient to trigger herding, though it remains a significant factor. Other variables, such as foreign sell, also affect herding, as domestic investors often imitate foreign investors perceived as better informed.

- H1: Actual return has a significant effect on herding behavior.
- H2: Required return has a significant effect on herding behavior.
- H3: Foreign sell has a significant effect on herding behavior
- H4: Expected return has a significant effect on herding behavior.
- H5: Risk has a significant effect on herding behavior.

The Simultaneous Influence of Independent Variables on Herding Behavior

Beyond partial effects, this study also examines the simultaneous impact of independent variables on herding behavior. Actual return, required return, expected return, risk, and foreign sell collectively have a significant effect on investor herding. Previous research supports this notion, showing that stock market structure, trading strategies, and institutional or foreign investor activity can trigger collective behavior in stock transactions (Wang & Nuangjamnong, 2022; Vieito et al., 2024). Both actual and expected returns provide signals about market conditions and profit potential, motivating investors to follow the majority (Blasco et al., 2012; Qasim et al., 2019).

Market risk further strengthens this behavior, as investors tend to seek protection against uncertainty by imitating the decisions of others, while foreign sell serves as a benchmark for domestic investors in adjusting their strategies. The interaction of these factors creates a complex dynamic influencing herding intensity simultaneously. This study contributes novelty by employing questionnaire-based indicators for risk, actual return, and expected return, addressing the research gap regarding the link between herding and expected return. The findings confirm that herding behavior is shaped by a combination of financial and psychological factors, enhancing understanding of investor behavior in emerging markets, particularly Indonesia, consistent with Ouarda et al. (2013) and Sadewo and Cahyaningdyah (2022), who emphasize the importance of the simultaneous influence of variables on herding.

H6: Actual return, required return, foreign sell, expected return, and risk simultaneously have a significant effect on investor herding behavior.

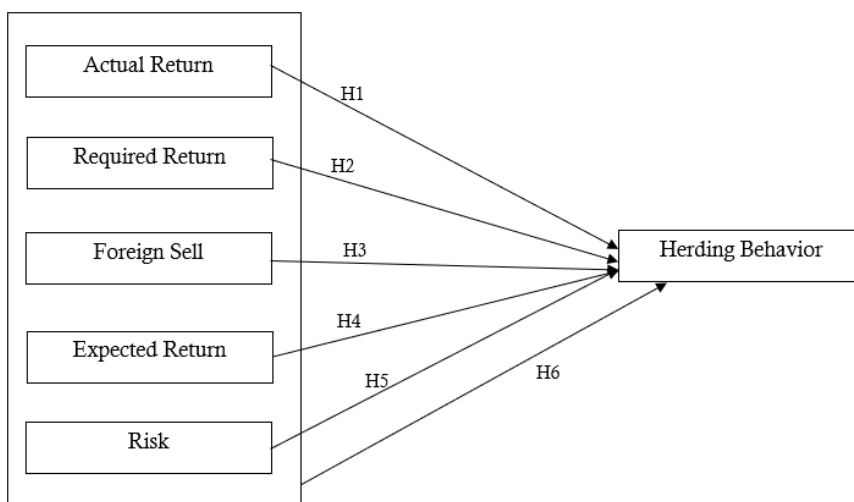


Figure 1. Research Framework

Figure 1 illustrates the hypothesized relationships between several independent variables and herding behavior. The independent variables include actual return, required return, foreign sell, expected return, and risk, each proposed to influence herding behavior (H1–H6). This model suggests that both market performance indicators and investor perceptions of risk and expected gains contribute to the tendency of investors to follow the actions of others in the market.

RESEARCH METHODS

This study employs a quantitative approach with an explanatory research design aimed at examining causal relationships among variables through statistical analysis. The quantitative method is selected because the study utilizes measurable financial data analyzed objectively using statistical techniques (Mohajan, 2020). This design enables the researcher to test the effects of foreign sell, required return, expected return, actual return, and risk on herding behavior in companies listed on the Indonesia Stock Exchange.

The population of this study consists of 95 manufacturing companies listed on the Indonesia Stock Exchange during the 2024–2025 period. The sampling technique used is purposive sampling, in which samples are selected based on specific criteria aligned with the research objectives. These criteria include companies that publish complete financial reports during the observation period, companies that present financial statements in IDR, and companies that provide complete data for all research variables. Thus, all population members meeting these criteria are included as the research sample.

The data collection technique employed in this study is documentation, conducted by downloading financial statements from the official website of the Indonesia Stock Exchange (IDX) as well as from the official websites of the respective companies. The data used are secondary data, including financial information and variables such as foreign sell, required return, expected return, actual return, risk, and herding indicators measured using the Cross-Sectional Standard Deviation (CSSD) approach. This method is considered appropriate as secondary data provide reliable empirical evidence reflecting actual capital market conditions.

The data analysis technique is conducted in several stages. First, descriptive analysis is performed to describe data characteristics, including mean, minimum, maximum, and standard deviation values. Second, classical assumption tests are carried out, including the normality test using the One-Sample Kolmogorov-Smirnov Test, multicollinearity test using the Variance Inflation Factor (VIF), autocorrelation test using the Durbin-Watson Test, and heteroscedasticity test using the Glejser test. Third, hypothesis testing is conducted using regression analysis, including the coefficient of determination (R^2), simultaneous test (F-test), and partial test (t-test) to examine the effects of independent variables on the dependent variable both jointly and individually. In addition, a paired t-test is employed to analyze differences in variables between January and December during the 2024–2025 period. All statistical tests are conducted at a 5% significance level ($\alpha = 0.05$), ensuring that the findings are valid and reliable in explaining herding behavior in the Indonesian capital market.

RESULTS

Descriptive statistical analysis is employed to provide a general overview of the characteristics of the research data for the January period. This analysis includes the number of observations (N), mean, standard deviation, minimum, and maximum values for each research variable. Through this approach, the distribution and variability of the variables' actual return, herding, foreign sell, required return, expected return, and risk can be identified, thereby offering an initial understanding of the data patterns prior to further analysis.

Table 1. Descriptive Statistics in January and December

Month	Variable	N	Mean	Std. Deviation	Minimum	Maximum
January	Actual Return	190	0.0087	0.0400	-0.1318	0.1975
	Herding	190	0.0003	0.0003	0.0000	0.0020
	Foreign Sell	190	7.2638	6.3798	0.0000	17.2428
	Required Return	190	0.0550	0.0075	0.0475	0.0625
	Expected Return	190	0.0699	0.0106	0.0593	0.0806
	Risk	190	-0.0009	0.0053	-0.0003	0.0002
December	Herding	190	4.6973	41.7537		
	Actual Return	190	0.5264	2.1539		
	Foreign Sell	190	7.5258	6.4967		
	Required Return	190	0.0538	0.0063		
	Expected Return	190	0.4727	2.1555		
	Risk	190	-0.0009	0.0053	-0.0003	0.0002

Table 1 presents the descriptive statistics of the research variables for January with a total of 190 observations. The results indicate that actual return has a relatively small positive mean with considerable variability. The herding variable shows a very low mean and minimal dispersion, suggesting the presence of herding behavior. Meanwhile, foreign sell exhibits substantial variation, indicating diverse foreign investor activity. The required return and expected return variables are relatively stable with low variability, while the risk variable has a mean close to zero with very small dispersion. The findings suggest that fluctuations occur in returns and foreign trading activity, whereas expectations and risk tend to remain stable.

The descriptive statistics of the research variables for December show that the herding variable had a mean of 4.69 and a standard deviation of 41.75. The actual return had a mean of 0.526 and a standard deviation of 2.15. Foreign sales had a mean of 7.52 and a standard deviation of 6.49. The required return had a mean of 0.0538 and a standard deviation of 0.00626. The expected return was 0.4727, and the standard deviation was 2.15.

Table 2. Normality Test

Test	Actual Return	Herding	Risk	Foreign Sell	Required Return	Expected Return
Test Value ^a	0.009	0.002	-0.040	7.264	0.055	0.070
Cases < Test Value	109	147	95	84	95	95
Cases >= Test Value	81	43	95	106	95	95
Total Cases	190	190	190	190	190	190
Number of Runs	90	65	2	90	2	2
Z	-0.586	-0.528	-13.675	-0.697	-13.675	-13.675
Asymp. Sig. (2-tailed)	0.558	0.597	0.053	0.486	0.060	0.080
Sig.	0.580	0.662	0.000	0.512	0.000	0.000
Lower Bound	0.537	0.621	0.000	0.468	0.000	0.000
Upper Bound	0.623	0.703	0.055	0.556	0.060	0.081

Table 2 presents the results of the normality test. Based on Asymp. Sig. (2-tailed) values, most variables, including actual return (0.558), herding (0.597), and foreign sell (0.486), have significance levels greater than 0.05, indicating that their data are normally distributed. Similarly, risk (0.053), required return (0.060), and expected return (0.080) also exceed the 0.05 threshold, suggesting acceptable normality. Although the Monte Carlo significance values show some variations, the results confirm that all variables meet

the normality assumption. Therefore, the data are considered appropriate for further parametric statistical analysis.

Table 3. F-Test in January and December

Month	Test	Sum of Squares	df	Mean Square	F-statistics	Sig.
January	Regression	0.000	5	0.000	5.446	0.000b
	Residual	0.003	184	0.000		
	Total	0.003	189			
December	Regression	276506.759	5	55301.352	192.025	0.000 ^b
	Residual	52990.322	184	287.991		
	Total	329497.080	189			

Table 3 presents the results of the F-test for January and December, examining the simultaneous effect of independent variables on herding behavior. In January, the F-statistic is 5.446 with a significance level of 0.000 (< 0.05), indicating that all independent variables jointly have a significant effect on herding. Similarly, in December, the F-statistic is 192.025 with a significance level of 0.000 (< 0.05), also confirming a significant simultaneous effect. These results suggest that the regression model in both periods is statistically significant and can explain the relationship between the independent variables and herding behavior.

Table 4. Hypothesis Testing Analysis in January and December

Month	Variable	B	Std. Error	Beta	t-statistics	Sig.	Tolerance	VIF
January	Constant	0.000	0.002		0.165	0.870		
	Actual Return	0.322	0.077	3.089	4.199	0.000	0.009	114.268
	Required Return	-3.182	0.000	-0.005	-0.045	0.964	0.378	2.645
	Foreign Sell	-1.776	0.000	-0.027	-0.246	0.806	0.387	2.585
	Expected Return	-0.049	0.038	-0.126	-1.283	0.201	0.494	2.024
	Risk	-2307.907	588.336	-2.933	-3.923	0.000	0.008	118.052
December	Constant	-48.215	11.859		-4.066	0.000		
	Actual Return	0.210	0.341	0.019	0.616	0.538	0.910	1.099
	Required Return	825.939	210.879	0.124	3.917	0.000	0.875	1.143
	Foreign Sell	0.036	0.208	0.006	0.175	0.862	0.831	1.203
	Expected Return	18.159	0.592	0.937	30.684	0.000	0.936	1.068
	Risk	-0.267	0.252	-0.032	-1.060	0.291	0.939	1.065

Table 4 indicates that in January, only actual return and risk have a statistically significant effect on herding behavior, with significant values of 0.000 (< 0.05). Actual return ($B = 0.322$; $t = 4.199$) is significant because investors tend to respond directly to realized market performance, which encourages them to follow prevailing market trends. Meanwhile, risk ($B = -2307.907$; $t = -3.923$) is also significant with a negative coefficient, suggesting that higher levels of risk lead investors to behave more cautiously, thereby reducing herding tendencies. In contrast, required return ($\text{Sig.} = 0.964$), foreign sell ($\text{Sig.} = 0.806$), and expected return ($\text{Sig.} = 0.201$) are not statistically significant, indicating that during this period, investors rely more on actual market conditions rather than expectations or external trading activities.

In December, the significant variables are required return and expected return, both with significant values of 0.000. required return ($B = 825.939$; $t = 3.917$) is significant as investors tend to align their decisions with minimum return expectations, particularly at the end of the year. Expected return ($B = 18.159$; $t = 30.684$) is also highly significant, implying that forward-looking expectations strongly influence investor behavior and promote herding. On the other hand, actual return ($\text{Sig.} = 0.538$), foreign sell ($\text{Sig.} =$

0.862), and risk (Sig. = 0.291) are not significant, suggesting that at year-end investors are more focused on future prospects than on current performance or risk considerations.

Table 5. Classical Assumptions Test in December

Test	Variable	B	Coeff. Std. Errors	Stand. Coeff. B	t	Sig	Tolerance	VIF
Heteroscedasticity (Glejser Test)	Constant	31.609	3.787		8.346	0.000		
	Actual Return	0.032	0.109	0.008	0.297	0.767	0.910	1.099
	Foreign Sell	0.016	0.067	0.007	0.237	0.813	0.831	1.203
	Required Return	-508.192	67.351	-0.212	-7.545	0.055	0.875	1.143
	Expected Return	5.979	0.189	0.858	31.636	0.060	0.936	1.068
	Risk	0.134	0.080	0.045	1.665	0.098	0.939	1.065
Autocorrelation (Durbin–Watson)	D-W Value	1.972						

Table 5 presents the results of the classical assumption tests for December. The heteroscedasticity test, conducted using the Glejser method, indicates that all independent variables, actual return, foreign sell, required return, expected return, and risk, have significance values exceeding 0.05, thereby confirming the absence of heteroscedasticity and suggesting that the model satisfies this assumption. In addition, the tolerance values above 0.10 and VIF values close to 1 demonstrate that there are no multicollinearity issues among the independent variables. Furthermore, the Durbin–Watson statistic of 1.972 falls within the acceptable range of -2 to $+2$, indicating that the model is free from autocorrelation. These findings confirm that the regression model fulfills the classical assumption criteria and is appropriate for subsequent analysis.

Table 6. R-Square Test

Test	Value
R	0.916 ^a
R-square	0.893
Adjusted R-square	0.835
Std. Error of the Estimate	16.97029401

Table 6 presents the coefficient of determination table explains that actual return, expected return, required return, foreign sell, and risk have an influence on herding of 0.835, meaning that 83.5% and the remaining 16.5% of herding are influenced by other variables outside the model.

Table 7. Paired Sample T-Test Results for Differences between January and December

Pair	Variable	Mean Difference	Std. Deviation	Std. Error Mean	Lower Bound	Upper Bound	t-statistic	df	Sig. (2-tailed)
1	sebulan – sebuDec	4.197	32.828	2.382	-0.500	8.895	1.762	189	0.080
2	Foreign Sell Jan – Foreign Sell Dec	-0.262	7.134	0.517	-1.283	0.759	-0.506	189	0.613
4	Expected Return Jan – Expected Return Dec	-0.525	2.159	0.157	-0.834	-0.216	-3.353	189	0.001
6	Actual Return Jan – Actual Return Dec	-0.518	2.157	0.156	-0.826	-0.209	-3.308	189	0.001
7	buyjan – buydes	0.226	6.58568	0.478	-0.716	1.169	0.474	189	0.636

Table 7 presents the results of the intervariable difference test, indicating a significant difference between expected and actual returns in January and December 2024–2025, each with a significance level of 0.001. The difference in expected returns from January to December is -0.525 with a t-statistic of -3.353. Meanwhile, the difference in actual returns from January to December is -0.518 with a t-statistic of -3.308.

Table 8. Paired Sample T-Test Results between Independent Variables and Herding (CSSD) in January

Pair	Variable	Mean Difference	Std. Deviation	Std. Error Mean	Lower Bound	Upper Bound	T-statistics	df	Sig. (2-tailed)
Pair 1	Required Return – Herding Jan	0.052	0.008	0.001	0.0509	0.053	91.347	189	0.000
Pair 2	Expected Return – Herding Jan	-0.054	0.040	0.003	-0.059	-0.048	-18.859	189	0.000
Pair 3	Foreign Sell – Herding Jan	7.262	6.379	0.463	6.349	8.175	15.690	189	0.000
Pair 4	Actual Return – Herding Jan	0.007	0.039	0.003	0.001	0.0127	2.463	189	0.015
Pair 5	Risk – Herding Jan	7.864	6.543	0.475	6.927	8.800	16.566	189	0.000

Table 8 presents the results of the paired sample T-Test between independent variables and herding in January 2024-2025. The results indicate significant differences between required return, expected return, foreign sell, actual return, and beta risk with respect to herding, all with significant values below 0.05. The high t-statistic for required return (91.347), expected return (-18.859), foreign sell (15.690), actual return (2.463), and beta risk (16.566) demonstrate that these variables statistically influence investor herding behavior, with actual return showing a relatively weaker effect compared to the other variables. These findings confirm that investors on the Indonesia Stock Exchange in January respond significantly to risk, expected return, foreign selling, and actual return when making collective investment decisions.

Table 9. Paired Sample Correlation in December

Pair	Variable	N	Paired Correlation	Sig. (2-tailed)
1	Required Return Dec & CSSD Dec	190	-0.107	0.141
2	Expected Return Dec & CSSD Dec	190	0.908	0.000
3	Foreign Sell Dec & CSSD Dec	190	0.082	0.261
4	Risk Dec & CSSD Dec	190	-0.018	0.804
5	Actual Return Dec & CSSD Dec	190	0.909	0.000

Table 9 presents the paired correlation results for December 2024–2025 regarding herding behavior (CSSD). The results indicate that expected return and actual return exhibit strong and significant positive correlations with CSSD, with correlation coefficients of 0.908 and 0.909 and significance levels of 0.000, suggesting a substantial influence on herding behavior. In contrast, required return, foreign sell, and risk show weak and non-significant correlations with CSSD, with correlation coefficients of -0.107, 0.082, and -0.018 and significance levels above 0.05, indicating that these variables do not significantly affect herding in December. These findings highlight that investors' herding behavior is primarily driven by expected and realized market returns rather than risk factors or foreign selling activities.

DISCUSSION

The results of this study indicate that herding behavior persists on the Indonesian Stock Exchange, as evidenced by the model's simultaneous significance in both January and December. This finding suggests that the independent variables collectively explain investors' herding behavior. It also implies that investors do not act fully rationally but tend to follow market trends or the decisions of the majority. This phenomenon is consistent with behavioral finance, particularly herding theory, which posits that under conditions of uncertainty, individuals tend to imitate the majority to minimize

information risk (Rahayu et al., 2021). This behavior can also be explained by the information cascade theory, where investors disregard their private information and follow collective decisions.

Foreign sell does not have a significant effect on herding behavior in either January or December. This indicates that domestic investors do not consistently rely on foreign investor activity when making investment decisions. Although this finding differs from that of Mand et al. (2023), who suggest that institutional or global investor activity can trigger herding, particularly in emerging markets, the present study shows that such influence is not statistically significant. Therefore, foreign investor activity does not play a dominant role in shaping herding behavior in this context.

Furthermore, expected return and required return are found to have a significant effect on herding behavior, but only in December. This can be explained by prospect theory, which suggests that investors are more sensitive to potential gains and losses based on their expectations (Thamrin et al., 2025). When expected returns are high, investors tend to follow market trends to maximize profit opportunities, thereby reinforcing herding behavior. However, in January, these variables are not significant, indicating that expectations are not the primary consideration at the beginning of the year.

Actual return exhibits different effects across periods, being significant in January but not in December. This suggests that the influence of realized returns on herding behavior is context-dependent. At the beginning of the year, investors tend to respond more strongly to actual market performance, encouraging them to follow prevailing trends. In contrast, at the end of the year, investors are more focused on future expectations rather than past performance. This finding contrasts with Christie and Huang (1995), who argue that herding intensifies during extreme market conditions and may reflect the characteristics of the Indonesian market as a developing market where psychological and sentiment-driven factors are more dominant than fundamentals.

Risk also demonstrates a varying effect across periods, being significant in January but not in December. This indicates that at the beginning of the year, investors are more sensitive to market uncertainty and adjust their behavior accordingly, including their tendency to engage in or avoid herding. This finding is consistent with Hwang and Salmon (2004) and Aharon (2021), who report that market uncertainty is associated with herding intensity. However, in December, risk is not significant, suggesting that it becomes less important compared to return expectations.

Partial analysis further reveals differences in variable influence across periods. In January, only actual return and risk significantly affect herding behavior, while foreign sell, required return, and expected return are not significant. Conversely, in December, required return and expected return have a significant effect, whereas actual return, foreign sell, and risk do not. These differences highlight the dynamic nature of investor behavior over time. Investors at the beginning of the year tend to be more responsive to actual conditions and risk, whereas at the end of the year, they are more influenced by expectations and return targets. This pattern may be driven by seasonal factors such as window dressing, year-end performance pressures, and institutional investment strategies. These findings are consistent with Arroisi and Koesrindartoto (2019) and Biondo et al. (2024). This study demonstrates that herding behavior in the Indonesian capital market is influenced by a combination of rational and irrational factors.

CONCLUSION

This study concludes that herding behavior still occurs on the Indonesia Stock Exchange, as demonstrated by the significance of the simultaneous regression models for the January and December 2024-2025 periods. However, the factors influencing herding differ between periods. In January, herding was significantly influenced by actual return and risk, indicating that investors rely on past market performance and are sensitive to uncertainty. Conversely, in December, herding was influenced by required return and expected return, indicating that investors focus more on future expectations and return targets. Foreign selling had no significant effect in either period. These findings suggest

that investor behavior is dynamic and influenced by a combination of rational and behavioral factors in decision-making.

The implications of this study highlight the need for enhanced investor literacy and monitoring foreign investor activity to mitigate the effects of herding. Improved regulation and education could help investors make more rational decisions, especially in volatile market conditions. The study has limitations, including its focus on the Indonesian Stock Exchange with a restricted period covering only January and December, as well as multicollinearity issues in some variables in January. Future research is recommended to extend the observation period, incorporate additional variables such as market sentiment, institutional activity, and macroeconomic indicators, and examine the impact of regulatory changes or external shocks. This approach can strengthen the understanding of herding dynamics in emerging markets and provide clearer guidance for policymakers and market participants.

FUNDING STATEMENT: This research did not receive any specific grant from funding agencies in the public, commercial, or not - for - profit sectors.

CONFLICTS OF INTEREST: The author declares no conflict of interest.

DECLARATION OF GENERATIVE AI STATEMENT: During the preparation of this work, the author used Turnitin, Grammarly, and ChatGPT to improve sentence structure and overall clarity. All content was then reviewed, edited, and refined by the author, who takes full responsibility for the accuracy, integrity, and originality of the final publication.

REFERENCES

- [1] Adnan, M. (2023). Modeling herding behavior in the Indonesian capital market. *International Journal of Economics, Business and Management Research*, 7(04), 167–179.
- [2] Ahmad, S. (2017). Factors influencing individual investors' behavior: An empirical study of Pakistan financial markets. *Journal of Business & Financial Affairs*, 4(6), 1–8.
- [3] Alexandridis, A. K., & Hasan, M. S. (2020). Global financial crisis and multiscale systematic risk: Evidence from selected European stock markets. *International Journal of Finance & Economics*, 25(4), 518–546.
- [4] Aharon, D. Y. (2021). Uncertainty, fear and herding behavior: Evidence from size-ranked portfolios. *Journal of Behavioral Finance*, 22(3), 320–337.
- [5] Arroisi, A., & Koesrindartoto, D. P. (2019). Domestic and foreign investor dynamics in Indonesian Stock Exchange: Evidence from 10 years high-frequency data. *Indonesian Capital Market Review*, 11(1), 4–16.
- [6] Baker, W. E., & Iyer, A. V. (1992). Information networks and market behavior. *Journal of Mathematical Sociology*, 16(4), 305–332.
- [7] Blasco, N., Corredor, P., & Ferreruela, S. (2012). Does herding affect volatility? Implications for the Spanish stock market. *Quantitative Finance*, 12(2), 311–327.
- [8] Biondo, A. E., Mazzarino, L., & Pluchino, A. (2024). Trading strategies and financial performances: A simulation approach. *International Review of Financial Analysis*, 95(1), 103–126.
- [9] Botosan, C. A., Plumlee, M. A., & Wen, H. E. (2011). The relation between expected returns, realized returns, and firm risk characteristics. *Contemporary Accounting Research*, 28(4), 1085–1122.
- [10] Campbell, J. Y., & Mei, J. (1993). Where do betas come from? Asset price dynamics and the sources of systematic risk. *The Review of Financial Studies*, 6(3), 567–592.
- [11] Christie, W. G., & Huang, R. D. (1995). Following the pied piper: Do individual returns herd around the market? *Financial Analysts Journal*, 51(4), 31–37.
- [12] Cont, R., & Bouchaud, J. P. (2000). Herd behavior and aggregate fluctuations in financial markets. *Macroeconomic Dynamics*, 4(2), 170–196.
- [13] Hoitash, R., & Krishnan, M. (2008). Herding, momentum and investor over-reaction. *Review of Quantitative Finance and Accounting*, 30(1), 25–47.
- [14] Hwang, S., & Salmon, M. (2004). Market stress and herding. *Journal of Empirical Finance*, 11(4), 585–616.

- [15] Ikhsan, M., Sakti, S. H., Abdoellah, M. N., & Hendro, J. (2024). The influence of representativeness bias and herding effect on investment decisions in the capital market. *Escalate: Economics and Business Journal*, 2(01), 1–8.
- [16] Karki, D., Dahal, R. K., Devkota, N., & Bhattarai, U. (2024). Investors' intrinsic motives and decision-making in the stock market. *Intellectual Economics*, 18(1), 59–79.
- [17] Kim, W., & Wei, S. J. (2002). Foreign portfolio investors before and during a crisis. *Journal of International Economics*, 56(1), 77–96.
- [18] Loang, O. K. (2025). Financial stability at risk: Evidence from market overreaction and herding behaviour in developed and emerging markets. *China Finance Review International*, 15(1), 67–92.
- [19] Mand, A., Janor, H., Abdul Rahim, R., & Sarmidi, T. (2023). Herding behavior and stock market conditions. *PSU Research Review*, 7(2), 105–116.
- [20] Maneemaroj, P., Lonkani, R., & Chingchayanurak, C. (2021). Appropriate expected return and the relationship with risk. *Global Business Review*, 22(4), 865–878.
- [21] Mohajan, H. K. (2020). Quantitative research: A successful investigation in natural and social sciences. *Journal of Economic Development, Environment and People*, 9(4), 50–79.
- [22] Obamuyi, T. M. (2013). Factors influencing investment decisions in capital market: A study of individual investors in Nigeria. *Organizations and Markets in Emerging Economies*, 4(07), 141–161.
- [23] Ouarda, M., El Bouri, A., & Bernard, O. (2013). Herding behavior under market conditions: Empirical evidence on the European financial markets. *International Journal of Economics and Financial Issues*, 3(1), 214–228.
- [24] Parihar, A. S., & Gupta, G. C. (2024). Examine how political and economic uncertainty influences stock market volatility and investor behaviour. *International Journal of Commerce and Management Research*, 10(3), 31–35.
- [25] Peterson, L., Homer, A. L., & Wonderlich, S. A. (1982). The integrity of independent variables in behavior analysis. *Journal of Applied Behavior Analysis*, 15(4), 477–492.
- [26] Puspitarini, N., & Prajawati, M. I. (2025). How herding behaviour and financial literacy affect young people's investment decisions. *Jurnal Akuntansi, Ekonomi dan Manajemen Bisnis*, 13(1), 54–62.
- [27] Qasim, M., Hussain, R., Mehboob, I., & Arshad, M. (2019). Impact of herding behavior and overconfidence bias on investors' decision-making in Pakistan. *Accounting*, 5(2), 81–90.
- [28] Rahayu, A. D., Putra, A., Oktaverina, C., & Ningtyas, R. A. (2021). Herding behavior in the stock market: A literature review. *International Journal of Social Sciences Review*, 1(2), 08–25.
- [29] Rahayu, S., Rohman, A., & Harto, P. (2021). Herding behavior model in investment decision on emerging markets: Experimental in Indonesia. *Journal of Asian Finance, Economics and Business*, 8(1), 053–059.
- [30] Sadewo, R. A. J., & Cahyaningdyah, D. (2022). Investor herding behavior in extreme conditions during COVID-19: Study on Indonesian stock market. *Management Analysis Journal*, 11(1), 22–29.
- [31] Seetharaman, A., Niranjan, I., Patwa, N., & Kejriwal, A. (2017). A study of the factors affecting the choice of investment portfolio by individual investors in Singapore. *Accounting and Finance Research*, 6(3), 153–168.
- [32] Shankar, K. U., Ahmad, W., & Kareem, S. A. (2021). Beta volatility and its consequences for hedging systematic risk with reference to stock market during COVID-19. *Information Technology in Industry*, 9(3), 482–492.
- [33] Spyrou, S. (2013). Herding in financial markets: A review of the literature. *Review of Behavioral Finance*, 5(2), 175–194.
- [34] Thamrin, T., Satrianny, I. P., Nasib, N., Amelia, R., & Julitawaty, W. (2025). The perceived risk in augmented reality on students' online purchase decisions. *Jurnal Ilmiah Manajemen Kesatuan*, 13(4), 2485–2496.
- [35] Vieito, J. P., Espinosa, C., Wong, W. K., Batmunkh, M. U., Choihil, E., & Hussien, M. (2024). Herding behavior in integrated financial markets: The case of MILA. *International Journal of Emerging Markets*, 19(11), 3801–3827.
- [36] Vo, X. V., & Phan, D. B. A. (2019). Herding and equity market liquidity in emerging market: Evidence from Vietnam. *Journal of Behavioral and Experimental Finance*, 24(1), 100–129.
- [37] Wang, P., & Nuangjamnong, C. (2022). Determinant factors of overconfidence, herding behavior, and investor elements on investment decision making in China. *Universal Journal of Financial Economics*, 1(1), 23–42.
- [38] Wibowo, B. Y. (2025). Behavioral economics insights into consumer decision-making in online marketplaces. *Jurnal Ilmiah Manajemen Kesatuan*, 13(4), 2133–2142.
- [39] Zakamulin, V. (2024). Stock price overreaction: Evidence from bull and bear markets. *Review of Behavioral Finance*, 16(6), 998–1011.
- [40] Zhang, Y. A., Li, Y., & Li, H. (2014). FDI spillovers over time in an emerging market: The roles of entry tenure and barriers to imitation. *Academy of Management Journal*, 57(3), 698–722.

*Factors Influencing
Herding Behavior in
IDX*

2824
